REMARKS

Claims 1-23 are pending in this application. Claims 1, 4, 5, 8, 9, 12, 13, 15, 18, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,101,198 to Koenig et al. (hereinafter "Koenig") in view of Applicant Admitted Prior Art. Claims 2, 3, 10, 11, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Koenig in view of Applicant Admitted Prior Art and further in view of U.S. Patent No. 6,415,348 to Mergard et al. (hereinafter "Mergard"). Claims 6, 7, and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Koenig in view of Applicant Admitted Prior Art and further in view of U.S. Patent No. 6,058,111 to Beyda et al. Claim 16 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Koenig in view of Applicant Admitted Prior Art and further in view of U.S. Patent No. 6,301,291 to Rouphael et al. Claim 17 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Koenig in view of Applicant Admitted Prior Art and further in view of U.S. Patent No. 5,063,592 to Cannella et al. Claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,483,556 to Pillan et al. (hereinafter "Pillan") in view of Applicant Admitted Prior Art. Claims 22 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pillan in view of Applicant Admitted Prior Art and further in view of Mergard.

The drawings have been objected to for failure to comply with several drawing requirements. The specification has been objected to due to informalities and for failing to provide proper antecedent basis for the claimed subject matter. Claim 1 has been rejected under 35 U.S.C. § 112, first paragraph, as not reasonably providing enablement of the claimed invention.

By the foregoing amendments, Applicants have amended the drawings and the specification to comply with the appropriate requirements. Independent claims 1, 9, and 15 have been amended to further recite a feature of the present application, namely, that each data highway is at least partially dedicated to a separate function. See page 5, lines 7-8 and 22-23; page 6, lines 4-5 and 20; page 7, line 25 to page 8, line 1; and page 8, lines 9-10 of the present application for discussion regarding one possible assignment of the time slots of the data highways to be used for separate functions.

As noted by the Examiner, Koenig recites a system (as shown in Figure 4) having two PCM highways (36, 38) transferring data from two T-1 lines (48, 50) that have been processed by framers (44). Two more PCM highways (52, 54) pass data to framers (60) and then to the T-1 lines (48, 50). The PCM highways (36, 38, 52, 54) are generic in nature, in that they do not have a specific function beyond carrying the data between the T-1 lines (48, 50) and a multiplexer (30) and a demultiplexer (32). See column 7, lines 14-55.

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In the present application, the PCM highways (68_1-68_3) each can have a specific function. For example, all of the time slots for PCM highway I (68_1) can be assigned to transfer data to and from an external PCM highway (66). See page 5, lines 7-8. Other examples of time slots assignments for the PCM highways II and III (68_2 and 68_3) are discussed at page 5, lines 22-23; page 6, lines 4-5 and 20; page 7, line 25 to page 8, line 1; and page 8, lines 9-10.

Because the data highways of the present application can have specific functions, they are different than the PCM highways of Koenig, and therefore, the present application is distinguishable from Koenig. Because the independent claims (i.e., claims 1, 9, and 15) are distinguishable over Koenig, the primary reference cited by the Examiner, no further discussion of the dependent claims (i.e., claims 2-8, 10-14, and 16-20) and the secondary references are necessary.

Pillan relates to a system and method for compressing data frames for transmission over a network. A data frame (TT_1) is analyzed to determine if information can be removed from the frame, producing a reduced frame (TR_1). The reduced frame is then compressed, producing a compressed reduced frame (TC_1). Additional transmission information is inserted into the compressed reduced frame to produce a safe compressed reduced frame (TS_1), also referred to as a transmitted second frame. See column 5, lines 11-43. All this frame manipulation works to

"achieve one of the main objects of the invention consisting in reducing as far as possible the size of the data to be compressed" (see column 5, lines 24-26).

Contrast Pillan with the present application, in which HDLC controllers I, II, III (114_1-114_3) are used to encode the D channel for transfer over the air interface (38). To assure that the HDLC encoding is preserved after transmission over the air interface (38), the D channel is again HDLC encoded prior to transmission. See page 7, lines 10-18. The Examiner's position is that encoding and compressing are equivalent (see paragraph 17, line 7 of the Office Action, "encoding (i.e., compressing)"). However, by definition, encoding and compressing are two different concepts. Encoding means "to convert data by the use of a code," whereas compression means "reducing the amount of storage space require to store a given amount of data, or reducing the length of message required to transfer a given amount of information." (See the enclosed definitions from the online version of Federal Standard 1037C, *Telecommunications: Glossary of Telecommunication Terms*.) Because encoding and compressing are not equivalent, claim 21 of the present application is distinguishable over Pillan. Because the independent claim (i.e., claim 21) is distinguishable over Pillan, the primary reference cited by the Examiner, no further discussion of the dependent claims (i.e., claims 22 and 23) and the secondary references are necessary.
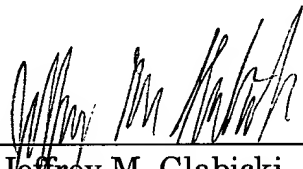
It is respectfully submitted that the amendments and remarks made herein place pending claims 1-23 in condition for allowance. Accordingly, entry of this amendment as well as reconsideration and allowance of pending claims 1-23 are respectfully requested.

If the Examiner does not believe that the claims are in condition for allowance, the Examiner is respectfully requested to contact the undersigned at 215-568-6400.

Respectfully submitted,

Kaewell, Jr. et al.

By _____

Jeffrey M. Glabicki
Registration No. 42,584
(215) 568-6400

Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103

JMG/SJG/gs
Enclosures